

A TAXONOMIC AND DISTRIBUTIONAL STUDY OF ADULT LIMNEPHILID CADDISFLIES OF WEST VIRGINIA (TRICHOPTERA: LIMNEPHILIDAE)¹

Paul L. Hill, Donald C. Tarter²

ABSTRACT: This paper represents the first systematic study of the limnephilid Trichoptera fauna of West Virginia. State and county records are reported for 24 species of the family Limnephilidae. Twenty state records were noted during the study period. *Pycnopsyche scabripennis* (Rambur) was by far the most abundant and widely distributed species and *Nemotaulius hostilis* (Hagen) and *Leptophylax gracilis* Banks were the least abundant species. Since the family Limnephilidae is a northern cold-hardy group, West Virginia became the southern limit of distribution for eight of the twenty-four species.

Until the present, only four limnephilid caddisflies have been reported from West Virginia: *Pycnopsyche divergens* (Walker), *P. lepida* (Hagen), *P. scabripennis* (Rambur) and *P. subfasciata* (Say) (Ross, 1944; Betten, 1950; and Hill et al., 1977). Limnephilid species are primarily northern in distribution. The habitats of the larval stage include lakes, ponds, marshes, streams, seeps and rivers. Twenty-four species were identified from light trap specimens throughout West Virginia. Twenty species are previously unpublished records for the state. West Virginia is the southern limit for eight species (Hill, 1977).

FAMILY LIMNEPHILIDAE

*State records

*1. *Ironoquia punctatissimus* (Walker)

Grant Co. (WVDA); Monroe Co., Hollywood (WVDA); Putnam Co., Hurricane (WVDA); Raleigh Co., Beckley (WVDA); Randolph Co., Valley Bend (WVDA); Tucker Co., Blackwater Falls State Park (USNM); Webster Co., Cranberry River (MU).

*2. *I. kaskaskia* (Ross)

Randolph Co., Valley Bend (WVDA).

*3. *Platycentropus radiatus* (Say)

Hardy Co., Trout Pond (WDW); Monroe Co., Hollywood (WVDA); Pendleton Co., Spruce Knob Lake (MU); Pocahontas Co., Tea Creek (MU); Raleigh Co., Grandview State Park (MU); Tucker Co., Red Creek (MU).

*4. *Nemotaulius hostilis* (Hagen)

Pocahontas Co., Arbovale (WVDA).

*5. *Hydatophylax argus* (Harris)

Monroe Co., Hollywood (WVDA); Nicholas Co., Summersville (WVDA); Pocahontas Co., (WVDA).

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² Dept. of Biol. Sci., Marshall University, Huntington, WV 25701

- *6. *Leptophylax gracilis* Banks
Monroe Co., Hollywood (WVDA).
- *7. *Limnephilus moestus* Banks
Pocahontas Co., Cranberry Glades (MU); Randolph Co., Gandy Creek (MU); Tucker Co., Blackwater Falls State Park (USNM).
- *8. *L. indivisus* Walker
Jefferson Co., Kearneyville (WVDA); Monroe Co., Hollywood (WVDA); Randolph Co., Valley Bend (WVDA).
- *9. *L. submonilifer* Walker
Putnam Co., Hurricane (WVDA); Randolph Co., Valley Bend (WVDA).
- *10. *Pycnopsyche circularis* (Provancher)
Monroe Co., Hollywood (WVDA); Putnam Co., Hurricane (WVDA).
11. *P. divergens* (Walker)
Pocahontas Co., Cranberry Glades (Hill et al., 1977).
- *12. *P. luculenta* (Betten)
Greenbrier Co., Summit Lake (MU); Monroe Co., Hollywood (WVDA); Randolph Co., Red Creek (MU); Webster Co., Cranberry River (MU).
13. *P. scabripennis* (Rambur)
Braxton Co., Two-Lick Run (MU); Kanawha Co., O'Possum Creek (WVDA); Mercer Co., Flattop Lake (MU); Monroe Co., Hollywood (WVDA); Nicholas Co., Cherry River (MU); Pendleton Co., White's Run (MU); Pocahontas Co., Cranberry River (MU); Putnam Co., Hurricane (WVDA); Raleigh Co. (WVDA); Randolph Co., Red Creek (MU), Valley Bend (WVDA); Webster Co., Cranberry River (MU) and Ross (1944) no county designated.
14. *P. subfasciata* (Say)
Jefferson Co., Kearneyville (WVDA); Monroe Co., Hollywood (WVDA); Randolph Co., Valley Bend (WVDA) and Betten (1950) no county designated.
- *15. *P. indiana* (Ross)
Pendleton Co., Smoke Hole Camp (USNM).
16. *P. lepida* (Hagen)
Monroe Co., Hollywood (WVDA); Putnam Co., Hurricane (WVDA); Pocahontas Co., Greenbank (WVDA); Randolph Co., Valley Bend (WVDA); Webster Co., Cranberry River (MU) and Ross (1944) no county designated.
- *17. *P. gentilis* (McLachlan)
Hampshire Co., South Branch of Potomac River (WDW); Nicholas Co., Summersville Reservoir (WDW); Randolph Co., Red Creek (MU).
- *18. *P. guttifer* (Walker)
Greenbrier Co., Summit Lake (MU); Pendleton Co., Smoke Hole Camp (USNM); Pocahontas Co., Tea Creek (MU); Tucker Co., Red Creek (MU); Webster Co., Cranberry River (MU).
- *19. *Pseudostenophylax uniformis* (Betten)
Pendleton Co. (USNM); Summers Co., Bluestone State Park (USNM); Tucker Co., Blackwater Falls State Park (USNM).
- *20. *P. sparsus* (Banks)
Grant Co. (WVDA); Hardy Co., Lost River State Park (WDW); Tucker Co., Blackwater Falls State Park (USNM).
- *21. *Neophylax autumnus* Vorhies
Pendleton Co., Spruce Knob Lake (MU); Putnam Co., Hurricane (WVDA); Raleigh Co., Beckley (WVDA); Randolph Co., Red Creek (MU), Valley Bend (WVDA).
- *22. *N. consimilis* Betten
Braxton Co., Two-Lick Run (MU); Monroe Co., Hollywood (WVDA); Randolph Co., Valley Bend (WVDA).

- *23. *N. stolus* Ross
Pendleton Co., Smoke Hole Camp (USNM).
*24. *Goera calcarata* Banks
Pendleton Co., Smoke Hole Camp (USNM).

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BOOK REVIEW

INSECT MAGIC. Kjell Sandved and Michael Emsley. Viking Press. 1978. 128 pp. \$16.95.

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